

Appl. No. : 10/715,046
Amdt. dated December 20, 2004
Reply to Office Action of Sep. 22, 2004

Amendments to the Specification:

Please replace the paragraph beginning at page 8, line 173, which starts with "Fig. 2 shows the hopper (50) of the " with the following amended paragraph:

Fig. 2 shows the hopper (50) of the preferred embodiment of the current invention placed on the prior art paintball gun shown in Fig. 1. In general, the hopper (50) is shaped to provide the overall look of a real gun. Within the hopper (50) is a central chamber (60) located above the working portion (10) of the paintball gun. The central chamber's (60) bottom is shaped to direct paintballs contained therein to the working portion (10) of the paintball gun. The paintball gun is gravity fed. Extending back from the central chamber (60) is a rear chamber (70) appropriately shaped to resemble a similarly located portion on a real gun such as a shoulder butt. Between the rear chamber (70) and the central chamber (60) is a rear gate (80) which is constructed so as to be normally gravity actuated, and which allows paintballs to flow from the rear chamber (70) to the central chamber (60) but not in the other direction. Extending forward from the central chamber (60) is a forward chamber (90) which conforms to the look of a real gun. Between the forward chamber (90) and the central chamber (60) is a forward gate (100) which is constructed so as to be normally gravity actuated, and which allows paintballs to flow from the forward chamber (90) to the central chamber (60) but not in the other direction. Fig. 7 shows hopper (50) separated from the paintball gun.

Please replace the paragraph beginning at page 10, line 201, which starts with "Not depicted in these figures is" with the following amended paragraph:

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~~Not depicted in these figures is a means for adding paintballs to the hopper (50).~~ For the purposes of filling hopper (50), it should be appreciated by one skilled in the art that there are many locations where an opening with a closure may be placed on the hopper (50). It should also be appreciated that there are innumerable configurations for openings with closures that could be applied to the present invention. In Fig. 2, rear fill port (110) is located in rear chamber (70) of hopper (50). Rear fill port (110) is shown in a closed state. In Fig. 7, where hopper (50) is shown removed from the paintball gun, another fill port, central fill port (140) is shown located on central chamber (60). In Fig. 7 central fill port (140) is shown in an open state with paint balls transiting through it into central chamber (60) to fill hopper (50).

Please replace the paragraph beginning at page 10, line 206, which starts with "Also not depicted in these figures is" with the following amended paragraph:

~~Also not~~ Not depicted in the figures is a means for filling the rear chamber (70) or the forward chamber (90) when the opening for filling the hopper (50) is not in that chamber. To do this, means would be provided for manually opening the appropriate gate so that paintballs may flow into the chamber. For example, if an opening is provided in the rear chamber (70) for filling the hopper (50), the gun would be held barrel down while manually holding forward gate (100) open so that paintballs flow from the rear chamber (70), past rear gate (80), through the central chamber (60), past the forward gate (100) and into the forward chamber (90) for storage until the central chamber (60) needs refilled from the forward chamber (90). Again it should be apparent that there are a myriad of ways to manually actuate a gate.

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Please replace the paragraph beginning at page 10, line 215, which starts with "It is contemplated that in some" with the following amended paragraph:

It is contemplated that in some embodiments a portion of the hopper (50) may be removable and interchangeable with a like removable portion. For example, in Fig. 2 the rear chamber (70) may be removably attached to the central chamber (60). Fig. 5 illustrates such an arrangement. Rear chamber (70) is shown full and ready to be attached to the back of hopper (50), where the paintballs may flow into central chamber (60) as regulated by rear gate (80). A user may carry an extra rear chamber (70) separate from the hopper (60) and, when needing to add paintballs to the hopper (60), remove the emptied rear chamber (70) and replace it with a full rear chamber (70). With the rear chamber (70) removed, central chamber (60) may also be filled directly from its rear where rear chamber (70) attaches. It should be readily apparent that many widely known means for removably joining two chambers would be applicable for such an embodiment. It is also apparent that other chambers in multiple chamber embodiments of this invention would provide similar opportunities for removable chambers used for refills.

Please replace the paragraph beginning at page 11, line 224, which starts with "It is also contemplated" with the following amended paragraph:

It is also contemplated that additional gates could be added to the hopper (50), particularly within the central chamber (60), where they may assist in controlling paintballs while the gun is being actively used and improve the flow of paintballs to the working portion of the

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paintball gun. Such an additional gate (120) is shown in Fig. 2, Fig. 3a & 3b, Fig. 4, Fig. 5, Fig. 6, and Fig. 7. Additional gate (120) is located near where the paintballs exit to the working portion (10) of the paintball gun. Additional gate (120) controls the movement of paintballs in central chamber (60) and keeps the paintballs near the exit when the paintball gun's barrel is elevated. Additional gates like additional gate (120) could also be manually operated while filling the hopper (50). All gates discussed may or may not have the capability of being fixed either in the open or closed position.

Please replace the paragraph beginning at page 11, line 230, which starts with "Fig. 4 depicts a paintball gun" with the following amended paragraph:

Fig. 4 depicts a paintball gun which is made with the hopper of the present invention built into the structure of the paintball gun. Overall, the appearance of the paintball gun is intended to be that of a real gun. This embodiment can have all of the elements of the previous embodiments such as a central, rear, and forward chambers separated by gates in between the chambers with the gates controlling the flow of the paintballs. The integral construction of the paintball hopper with the rest of the gun provides many opportunities for increasing the size and number of the chambers. ~~The order of connection of the chambers may even be varied. For example, if a chamber is added below the barrel of the paintball gun, it may be more functional to connect this chamber to a chamber in the rear of the gun via a passage through the working portion of the gun. The latter chamber may then be connected to a third chamber located above~~

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~~the working portion of the gun.~~

Please add the following new paragraph after the paragraph beginning at page 11, line 230, which starts with "Fig. 4 depicts a paintball gun":

Fig. 6 shows an embodiment of the present invention where the integral construction of the hoppers facilitates the addition of a lower portion 130 to forward chamber 90 beneath barrel 20 of the paintball gun. Provision is made for paintballs to pass from lower portion 130 to the upper portion of forward chamber 90. From there the paintballs may flow to central chamber 60. The order of connection of the chambers may even be varied. For example, if a chamber is added below the barrel of the paintball gun, it may be more functional to connect this chamber to a chamber in the rear of the gun via a passage through the working portion of the gun. The latter chamber may then be connected to a third chamber located above the working portion of the gun.